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7590 03/09/2006			EXAMINER	
RICHARD F. JAWORSKI			STARKS, WILBERT L	
Cooper & dunham LLP 1185 Avenue of the Americas			ART UNIT	PAPER NUMBER
New York, NY 10036			2129	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	A 11 41 11 -	Applicant(s)				
Office Action Summary	10/760,511	YANG ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAN INO DATE of this communication con	Wilbert L. Starks, Jr.	2129				
The MAILING DATE of this communication app Period for Reply	lears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 27 De	ecember 2005.					
· · · · · · · · · · · · · · · · · · ·	action is non-final.					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims	•					
4)⊠ Claim(s) <u>1-19,22,23 and 26-43</u> is/are pending i	n the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-19,22,23 and 26-43 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) acce		Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119		•				
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents	s have been received in Application	on No				
<ol><li>Copies of the certified copies of the prior</li></ol>	ity documents have been receive	ed in this National Stage				
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •					
* See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attachment(s)	_					
1) Motice of References Cited (PTO-892) 2) Motice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
2) ☐ Notice of Dialisperson's Patent Diawing Review (P10-946)  3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date		5) Notice of Informal Patent Application (PTO-152)				

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 101

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-19, 22-23, and 26-43 is directed to non-statutory subject matter.

2. None of the claims is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "consultation request" references in claims 1-19, and 42 and Applicant's "train request" references in claims 22-23 and 43 are just such abstract ideas.

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3. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

Today we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result" -- a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. (emphasis added) State Street Bank at 1601.

- 4. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se statutory*. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."
- 5. The court was being very specific.
- 6. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording

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purposes and even accepted and <u>relied upon</u> by regulatory authorities and in subsequent <u>trades</u>." (i.e. the trading activity is the <u>further practical use</u> of the real world <u>monetary</u> data beyond the transformation in the computer – i.e., "post-processing activity".)

7. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

8. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[The dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

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9. Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases.

Accordingly, the Examiner finds that Applicant manipulated a set of abstract "consultation requests" and "train requests" to solve purely algorithmic problems in the abstract (i.e., what *kind* of "requests" are used? Algebraic word problems? Boolean logic problems? Fuzzy logic algorithms? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of "consultation requests" and "train requests" is provably even more abstract (and thereby less limited in practical application) than pure "mathematical algorithms" which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

10. Since the claims are not limited to <u>exclude</u> such abstractions, the broadest reasonable interpretation of the claim limitations <u>includes</u> such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. §101 doctrine.

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11. Since Warmerdam is within the Alappat-State Street Bank line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in State Street Bank. Therefore, under State Street Bank, this could not be a "useful, concrete and tangible result". There is only manipulation of abstract ideas.

12. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T*Corp. v. Excel Communications, Inc. decision. The Court reminded us that:

Finally, the decision in In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. \*\*\* The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that 'taking several abstract ideas and manipulating them together adds nothing to the basic equation'; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

- 13. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under §101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.
- 14. The fact that the invention is merely the manipulation of abstract ideas is clear. The data referred to by Applicant's phrases "consultation request" and "training request" are simply abstract constructs that do not limit the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under AT&T, State Street and Warmerdam, is

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straightforward and clear. The claims take several abstract ideas (i.e., "consultation requests" and "training requests" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-19, 22-23, and 26-43 are, thereby, rejected under 35 U.S.C. §101.

# Claim Rejections - 35 USC §112

The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

15. Claims 1-19, 22-23, and 26-43 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 Incorporates as a matter of law the requirement of 35 U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention."). See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-19, 22-23, and 26-43 are rejected on this basis.

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# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6, 8-15, 17-19, 22-23, and 26-30, 32-39, and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by *Neugents Are on The Loose*<sup>1</sup>. Specifically,

## Claim 1

Claim 1's

a client; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"The <u>Unicenter</u> TNG performance Neugent gives the management staff more confidence in what it does to make things better by providing proactive support," said Fernando Peixoto, consulting analyst, AGF Brazil. "Simply put, Neugents move us away from fire-fighting mode, and that means better service for our <u>clients</u>."

Claim 1's

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receive a consultation request from the client through a computer network, the consultation request associated with data for consulting a Neugent;

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 1's

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a <u>predictive analysis</u> with respect to the data for consulting the Neugent that is associated with the consultation request; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate <u>accurate predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

#### Claim 1's

forward to the client through the <u>computer network</u> a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

<sup>&</sup>lt;sup>1</sup> Neugents Are on The Loose, The E-Business Adviser, April/May 2000, at 1.

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One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 2

Claim 2's

2. (Currently amended) The system of claim 1, wherein the consultation request comprises the <u>data for consulting the Neugent</u>.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process <u>information</u> and generate accurate predictions based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

#### Claim 3

Claim 3's

3. (Currently amended) The system of claim 2, wherein the Neugent is operable to perform the <u>predictive analysis</u> of the data comprised by the consultation request.

is anticipated by *Neugents Are on The Loose*, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based

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on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

## Claim 4

#### Claim 4's

4. (Currently amended) The system of claim 1, wherein the consultation request comprises identification of a source of the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

"Neugents enable companies to warehouse huge, complex data sets; intelligently process <u>information</u> and generate accurate predictions based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

# Claim 5

#### Claim 5's

5. (Currently amended) The system of claim 4, wherein the Neugent is operable to perform the <u>predictive analysis</u> of input data obtained from the source identified in the consultation request.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based

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on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

# Claim 6

Claim 6's

6. (Currently amended) The system of claim 1, wherein the service broker operable to: receive a training request from the client, the training request comprising training data and forward the training request comprising the training data to the Neugent to invoke training of the Neugent with the training data.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then <u>create mathematic profiles of those</u> <u>patterns based on historical data</u>. Once they've studied enough data, they can automatically generate forecasts of future events.

#### Claim 7

7. (Currently amended) The system of claim 6, wherein the training request comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.

## Claim 8

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Claim 8's

8. (Currently amended) The system of claim 6, wherein the service broker is operable to forward to the client a training result object returned by the Neugent after training of the Neugent.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents learn a network's normal range by a process called pattern recognition. They then create mathematic profiles of those patterns based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

# Claim 9

Claim 9's

9. (Currently amended) The system of claim 1, wherein the Neugent is operable to: group training data patterns into clusters, each cluster corresponding to a group of similar data patterns and predict a probability of membership of an input pattern to a selected group, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

# Claim 10

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10. (Currently amended) The system of claim 1, wherein the Neugent is operable to: group training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 10's

<u>predict a probability</u> of membership of an input non-numeric pattern to a selected group, the data associated with the consultation request comprising the input non-numeric pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate <u>accurate predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

#### Claim 11

Claim 11's

11. (Currently amended) The system of claim 1, wherein the Neugent is operable to: form a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar

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data patterns and determining for each cluster probabilities of transition from the cluster to each of the other clusters; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 11's

<u>predict a probability</u> of an event occurring by applying an input pattern to the cluster model, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

## Claim 12

Claim 12's

form an <u>input-output model</u> associated with a set of training data patterns; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

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Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive predictions about its future.

Claim 12's

predict an output value by applying the model to an input pattern, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive <u>predictions</u> about its future.

## Claim 13

Claim 13's

form rules associated with corresponding relationships in a set of training data patterns; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next

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step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive predictions about its future.

Claim 13's

predict an outcome by applying the rules to an input pattern, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive <u>predictions</u> about its future.

## Claim 14

Claim 14's

14. (Currently amended) The system of claim 1, wherein the Neugent comprises a functional-link net.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive predictions about its future.

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## Claim 15

Claim 15's

15. (Currently amended) The system of claim 1, wherein the service broker is comprises a remote server.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 16

16. (Currently amended) The system of claim 15, wherein the consultation request comprises an Extended Markup Language document.

## Claim 17

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Claim 17's

17. (Original) The system of claim 15, wherein the Neugent is serverside.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 18

Claim 18's

receiving a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent;

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

Claim 18's

forwarding the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a

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<u>predictive</u> analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

Claim 18's

forwarding to the remote client machine through the <u>computer network</u> a result object returned by the Neugent the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

#### Claim 19

Claim 19's

a program storage device readable by the computer system, tangibly embodying a program of instructions; and

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

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One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

Claim 19's

receive a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent;

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

Claim 19's

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a <u>predictive analysis</u> with respect to the data for consulting the Neugent that is associated with the consultation request; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

Claim 19's

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forward to the remote client machine through the <u>computer network</u> a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 22

Claim 22's

receiving a train request from the remote client machine through a computer network, the train request associated with training data for training the Neugent;

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 22's

forwarding the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

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is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 22's

forwarding to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.

is anticipated by *Neugents Are on The Loose*, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

# Claim 23

Claim 23's

a program storage device readable by the computer system, tangibly embodying a program of instructions; and

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

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One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

Claim 23's

receive a train request from the remote client machine through a computer network the train request associated with training data for training the Neugent;

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 23's

forward the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 23's

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forward to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 26

Claim 26's

26. (New) The method of claim 18, wherein the consultation request comprises the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

#### Claim 27

Claim 27's

27. (New) The method of claim 26, wherein the Neugent is operable to perform the predictive analysis of the data comprised by the consultation request.

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is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

#### Claim 28

Claim 28's

28. (New) The method of claim 18, wherein the consultation request comprises identification of a source of the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

# Claim 29

Claim 29's

29. (New) The method of claim 28, wherein the Neugent is operable to perform the predictive analysis of input data obtained from the source identified in the consultation request.

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is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

## Claim 30

Claim 30's

receiving a training request from the remote client machine, the training request comprising training data; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 30's

forwarding the training request comprising the training data to the Neugent to invoke training of the Neugent with the training data.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

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## Claim 31

31. (New) The method of claim 30, wherein the training request comprises a parameter specifying a ratio by which to split the training data between training the Neugent and testing the Neugent.

# Claim 32

Claim 32's

32. (New) The method of claim 30, comprising forwarding to the remote client machine a training result object returned by the Neugent after training of the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 33

Claim 33's

grouping, at the Neugent training data patterns into clusters, each cluster corresponding to a group of similar data patterns; and

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is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 33's

predicting, at the Neugent, a probability of membership of an input pattern to a selected group, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

#### Claim 34

Claim 34's

grouping, at the Neugent, training non-numeric patterns into clusters, each cluster corresponding to a group of similar non-numeric patterns; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

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Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 34's

predicting, at the Neugent, a probability of membership of an input nonnumeric pattern to a selected group, the data associated with the consultation request comprising the input non-numeric pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

#### Claim 35

Claim 35's

forming, at the Neugent, a cluster model by grouping training data patterns into a plurality of clusters, each cluster corresponding to a group of similar data patterns and determining for each cluster probabilities of transition from the cluster to each of the other clusters; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u>

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<u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 35's

predicting, at the Neugent, a probability of an event occurring by applying an input pattern to the cluster model, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

## Claim 36

Claim 36's

forming, at the Neugent, an <u>input-output model</u> associated with a set of training data patterns; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive predictions about its future.

Claim 36's

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predicting, at the Neugent, an output value by applying the model to an input pattern, the data associated with the consultation request comprising the input pattern.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive predictions about its future.

## Claim 37

Claim 37's

forming, at the Neugent, rules associated with corresponding relationships in a set of training data patterns; and

is anticipated by *Neugents Are on The Loose*, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 37's

predicting, at the Neugent, an outcome by applying the rules to an input pattern, the data associated with the consultation request comprising the input pattern.

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is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

#### Claim 38

Claim 38's

38. (New) The method of claim 18, wherein the Neugent comprises a functional-link net.

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Network agents notify managers of the status of the network and provide information to support management decision-making. The next step on this path is the <u>neural network</u> agent. This new technology not only informs management of the status of the network, but also learns its normal status and makes proactive predictions about its future.

Claim 38's

## Claim 39

Claim 39's

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39. (New) The method of claim 18, wherein the method is performed at a remote Server.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 40

40. (New) The method of claim 39, wherein the consultation request comprises an Extended Markup Language document.

## Claim 41

Claim 41's

41. (New) The method of claim 39, wherein the Neugent is server-side.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

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One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

#### Claim 42

#### Claim 42's

receive a consultation request from the remote client machine through a computer network, the consultation request associated with data for consulting the Neugent;

is anticipated by *Neugents Are on The Loose*, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that reside at <u>network devices</u>, send notifications to a management console and alert managers of network problems.

#### Claim 42's

forward the consultation request to the Neugent to invoke a consultation of the Neugent, the Neugent operable to perform a predictive analysis with respect to the data for consulting the Neugent that is associated with the consultation request; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

"Neugents enable companies to warehouse huge, complex data sets, intelligently process information and generate accurate <u>predictions</u> based on that data," said Charles B. Wang, chairman and CEO of Computer Associates.

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Claim 42's

forward to the remote client machine through the computer network a result object returned by the Neugent, the result object comprising a prediction determined by the Neugent with respect to the data for consulting the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

## Claim 43

Claim 43's

receive a train request from the remote client machine through a computer network the train request associated with training data for training the Neugent;

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 43's

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forward the train request to the Neugent to invoke training of the Neugent, training of the Neugent comprising causing the Neugent to perform a data analysis of the training data; and

is anticipated by Neugents Are on The Loose, pg. 8, where it recites:

Neugents <u>learn</u> a network's normal range by a process called pattern recognition. They then create <u>mathematic profiles of those</u> <u>patterns</u> based on historical data. Once they've studied enough data, they can automatically generate forecasts of future events.

Claim 43's

forward to the remote client machine through the computer network a training result object returned by the Neugent, the training result object comprising a data classification mechanism operable to facilitate performance of a predictive analysis by the Neugent.

is anticipated by Neugents Are on The Loose, pg. 1, where it recites:

One technique for handling this type of management is the use of network agents -- small programs that <u>reside at network devices</u>, send notifications to a management console and alert managers of network problems.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Raisinghani, et al, An Automated Executive and Managerial Performance A. Monitoring, Measurement and Reporting System, Journal of Electronic Commerce Research, Vol. 2, No. 1, 2001, pp. 23-31.

Computer Associates, Office of the CTO, White Paper: Comprehensive B. eBusiness Intelligence, Nov. 26, 2001, pp. 1-10.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

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WLS

02 March 2006